

Table S6. Kruskal-Wallis test of differences in parasite fluorescence intensities in *A. stephensi* (As), *A. gambiae* (Ag) and *A. gambiae* silenced for *TEP1* (*Ag^{TEP1KD}*) between the indicated time points after infection (hpi).

| Ookinete fluorescence intensity | | | | Kruskal Wallis test |
|---------------------------------|---------------------------|--------------------------|--------------------------|---------------------|
| | 18-20 hpi | 21-23 hpi | 24-25 hpi | P value |
| As | | | | |
| blood meal | >24-25 hpi <21-23 hpi | >18-20 hpi >24-25 hpi | <18-20 hpi <21-23 hpi | |
| cell layer | >24-25 hpi | ns | <18-20 hpi | 0.01 |
| basal lamina | >24-25 hpi | ns | <18-20 hpi | 0.037 |
| Ag | | | | |
| blood meal | <21-23 hpi < 24-25 hpi | >18-20 hpi | >18-20 hpi | 1.29E-08 |
| cell layer | <21-23 hpi | >18-20 hpi | ns | 0.045 |
| basal lamina | ns | ns | ns | 0.1171 |
| Ag^{TEP1KD} | | | | |
| blood meal | ns | ns | ns | 0.313 |
| cell layer | ns | >24-25 hpi | <21-23 hpi | 0.008 |
| basal lamina | ns | ns | ns | 0.648 |